PRESSURE CONTROLLED FLUID SAMPLING APPARATUS AND METHOD

ABSTRACT OF THE DISCLOSURE

A formation fluid sampling tool is provided. The formation fluid sampling tool includes at least one sample tank mounted in a tool collar. The tool collar includes a through bore and is disposed to be operatively coupled with a drill string such that each sample tank may receive a correspondingly preselected formation fluid sample without removing the drill string from a well bore. At least one of the sample tanks further includes an internal fluid separator movably disposed therein. The separator separates a sample chamber from a pressure balancing chamber in the sample tank. The pressure balancing chamber is disposed to be in fluid communication with drilling fluid exterior thereto. The sampling tool further includes a sample inlet port connected to the sample chamber by an inlet passageway. A method is also provided for acquiring a formation fluid sample from a formation of interest.